

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 1-5 stand rejected under 35 USC §103(a) as being unpatentable over Foladare et al. (US 5,914,472). Claim 6 stands rejected under 35 USC §103(a) as being unpatentable over Foladare in view of Walker et al. (US 6,327,348). Applicants respectfully submit that the amended claims are allowable over these references whether considered alone or in combination.

Foldare et al. disclose a system and method for allowing a parent (account holder) to control the use of an ancillary credit or debit transaction card which is issued to a child. When the child presents the ancillary transaction card to a merchant in payment of merchandise, the merchant swipes the card and contacts a central computer for card authorization. The central computer has a database containing account information and spending limits for the transaction card. If the credit limit of the ancillary card holder has been exceeded according to the database, the central computer retrieves from the database a phone number, pager number or other personal communications number for the account holder (col. 4, lines 34-39). The central computer initiates contact with the parent via, for example, two way pager, cellular telephone, or other personal communication

service, for authorization of the transaction. Then, if authorization is provided by the parent, the central computer forwards an approval/refusal code to the merchant.

Walker et al. disclose a method and apparatus for controlling credit card use. The method involves linking the first and second persons (account holder and user) to a financial account that is used for the transaction, receiving data identifying the financial account and a third party (merchant) from the third party, inquiring whether the first person desires to communicate with the second person based on the data identifying the financial account, and enabling communication between the first and second persons based on a response to the inquiry from the first person and the data identifying the third party. At a point of sale, the merchant facilitates transactions by using a card authorization terminal, for transmitting a purchase authorization request to a server. The purchase authorization request includes data indicating a purchase amount for the goods, an identifier that identifies a credit card that the user is presenting for payment, a merchant ID that identifies the merchant, and an identifier that identifies the CAT from which the purchase authorization request is transmitted. Unless the merchant ID matches an ID on an approved list, the transaction is denied (col. 6, lines 62-65).

Independent claims 1-3 and 5 have been amended to recite requesting connection to a mobile communication terminal through a mobile communication line by using a mobile communication terminal number registered in the member database. These amendments emphasize that the authentication determination relies on a double control feature. In a first aspect of the double control feature, member information is communicated to a remotely located database, through an open communication line, for the purpose of identifying the member at this database. In a second control aspect, a communication connection to the member is requested through a mobile communication line using a mobile terminal number registered in the database. In short, two independent and different communication lines are used for the double-control authentication. With this feature, an unauthorized user can be detected and rejected, even if he or she unlawfully obtains the member's password. As a result, the security of the member's account is greatly increased.

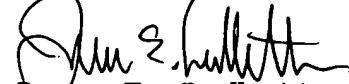
The Applicants respectfully submit that Foadare and Walker, considered alone or in combination, fail to disclose or suggest at least the claimed double control authentication feature employing two independent and different communication lines of claims 1-6. Therefore, it is submitted that allowance of claims 1-6 is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Date: March 24, 2003
JEL/DWW/att

Respectfully submitted,



James E. Ledbetter
Registration No. 28,732

Attorney Docket No. JEL 31225
STEVENS DAVIS, MILLER & MOSHER, L.L.P.
1615 L Street, N.W., Suite 850
P.O. Box 34387
Washington, D.C. 20043-4387
Telephone: (202) 785-0100
Facsimile: (202) 408-5200

Exhibit I

IN THE CLAIMS:

Kindly amend the claims as follows.

1. (Amended) An authentication method comprising the steps of:

(a) receiving a member ID information from a user through an open information communication line;

(b) identifying a member by comparing a member ID information registered in a member database and the member ID information from the user;

(c) requesting connection to a mobile communication terminal of the member through a mobile communication line by using a mobile communication terminal number registered in said member data base when the member is identified; and

(d) judging authentication when an authentication approval signal is received from said mobile communication terminal.

2. (Amended) An authentication apparatus comprising:
a member database registering an information of members;
an individual authentication control means for receiving a member ID information from a user, through an open information communication line;

a basic authentication means for identifying a member by comparing a member ID information registered in said member database and the member ID information received from said individual authentication control means; and

a mobile communication authentication means for requesting connection to a mobile communication terminal of the member through a mobile communication line using a mobile communication terminal number registered in said member data base, when the member ID from the user is authenticated by said basic authentication means;

wherein said authentication apparatus judges that the authentication is successful, when receiving an authentication approval signal from said mobile communication terminal.

3. (Amended) An accounting method comprising the steps of:

(a) receiving a member ID information from a user and an accounting amount relating to a service, through an open information communication line;

(b) identifying a member by comparing a member ID information registered in a member database and the member ID information from the user;

(c) requesting connection to a mobile communication terminal of a debtor through a mobile communication line by using a mobile

communication terminal number registered in said member data base, when the member is identified;

(d) inquiring approval or rejection of a payment of a charge to the debtor; and

(e) registering the accounting amount in said member database together with an information about service presentation, when receiving a signal approving the payment of the charge by the debtor from said mobile communication terminal, and deducting the accounting amount from a bank account registered preliminarily.

4. (Amended) An accounting method as defined in claim 3 further comprising the step of:

receiving a facility ID information of a facility for the [service] service presentation, through the open information communication line; and

identifying the facility.

5. (Amended) An accounting apparatus comprising:

a member database registering an information of members;

accounting authentication control means for receiving the member ID information from a user and accounting amount relating to a service, through an open information communication line;

basic authentication means for identifying a member by comparing a member ID information registered in said member database and the member ID information received from said accounting authentication control means;

mobile communication authentication means for requesting connection to a mobile communication terminal of a debtor registered in said member database through a mobile communication line, when the member ID from the user is authenticated by said basic authentication means; and

accounting means for deducting the accounting amount from a bank account registered preliminarily, and registering the accounting amount in the database together with an information about service presentation, when receiving an approval signal for the accounting amount from the mobile communication terminal of the debtor.

6. (Amended) An accounting apparatus as defined in claim 5 further comprising:

a facility database registering the information of service presentation facility; and

facility authentication means,

wherein said accounting authentication control means further receives a facility ID information for identifying the facility, through the open information communication line,

[wherin] wherein said facility authentication means identifies the facility by comparing a facility ID information registered in said facility database and the facility ID information received from said accounting authentication control means, and

wherein said mobile communication authentication means requests connection to the mobile communication terminal of the debtor registered in the member database, when the facility ID and member ID are authenticated by said facility authentication means and said basic authentication means.